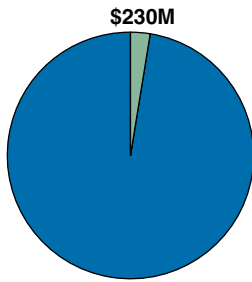


## Goal 6 FY 2000 Obligations



**Note: EPA FY 2000 Obligations were \$8,974 million**

## GOAL 6: REDUCTION OF GLOBAL AND CROSS-BORDER ENVIRONMENTAL RISKS

**The United States will lead other nations in successful multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.**

### OVERVIEW

Environmental hazards, like ecosystems, are not limited by national borders. Transboundary circulation of toxic chemicals; marine pollution; depletion of the stratospheric ozone layer; climate change; safety issues posed by the international trade in chemicals, pesticides, and biotechnology products; and similar global issues all pose significant risks to the United States. Unilateral domestic actions and investments cannot adequately protect the well-being of people or the environment from such risks. Therefore, collaboration with other countries and tribal nations is essential in protecting not only the domestic environment but also the global environment. Agency programs address this need by fostering multilateral cooperation on environmental and trade issues and enhancing foreign countries' technical capacity for addressing environmental risks globally.

### FY 2000 PERFORMANCE

#### Ensuring a Healthy and Sustainable Environment Along the U.S.-Mexico Border

The U.S.-Mexico Border XXI Program continues to make progress in addressing the region's serious environmental problems. For example, air emissions inventories and monitoring networks, which serve as the basis for local air quality management plans, are in place in the three largest border sister cities (which have a total U.S.-Mexican population of more than five million). There have been dramatic improvements in the availability of water and sewer services in the border area, primarily because of partnerships with the Border Environment Cooperation Commission (BECC) and the North American Development Bank, including the EPA funded Border Environment Infrastructure Fund. Thirty BECC-certified projects are in various stages of

construction or have been built in the border area, and they ultimately will serve about seven million border residents. Six sister-city pairs now have contingency plans to respond to chemical emergencies, and systems are in place to allow cross-border responses to hazardous substance incidents. The two countries have established a mechanism to provide information to the public about new and existing treatment, storage, and disposal facilities for hazardous and radioactive wastes. In addition a system to track hazardous waste returned to the United States for disposal will ensure safe disposal and to serve as an enforcement tool.

#### Restoring and Maintaining the Great Lakes Basin Ecosystem

The Great Lakes Basin contains one-fifth of all the world's surface fresh water (six quadrillion gallons of water, enough to cover the entire conterminous United States to a depth of about ten feet). Environmental data on the health of the basin are indicating some improvement, yet some areas show no sign of recovery. EPA's ability to assess environmental progress and challenges in the Great Lakes Basin was further enhanced in FY 2000 with the release of 31 reports on proposed comprehensive, basin-wide indicators (<http://www.on.ec.gc.ca/solec/indicators2000-e.html>).

In partnership with states, EPA continues to address challenges in the Great Lakes. In FY 2000 the Agency accelerated the development of Lakewide Management Plans, issued a plan for each lake in April 2000, and approved six state programs tailored to protect the water quality of the Great Lakes. The Great Lakes Program reported the following developments in FY 2000:

- There was a small increase in reported Great Lakes beach closures in 1999 as a result of beach managers' adopting closing criteria more protective

of human health and conducting more frequent monitoring.

- Concentrations of polychlorinated biphenyls (PCBs) and pesticides in the air continue to decline; however, concentrations of polynuclear aromatic hydrocarbons in the air (from combustion of fossil fuels and other organic substances) have remained relatively constant.
- Fish advisories continue for all of the Great Lakes as a result of toxic contaminants from the air and sediments; for example, PCB concentrations in Lake Michigan coho salmon are ten times higher than the health protection value.
- Oxygen depletion in the Central Basin of Lake Erie indicates potential for increasing severity of problems such as excess phosphorus and difficulty sustaining bottom-dwelling fish and other biota.
- New invasive species are expected to have ecosystem and economic impacts; for example, *Daphnia lumholtzi*, a small crustacean, was recently identified as the 160<sup>th</sup> aquatic invasive species in the Great Lakes.

In FY 2000 EPA also continued to address contaminated sediments, a major source of fish and wildlife contamination in the Great Lakes. Contaminated sediments have contributed to impairments to more than 2,000 miles (20 percent) of shoreline and to the fish consumption advisories in place throughout the Great Lakes. More than 1,600,000 cubic yards of contaminated sediments have been remediated during the past 4 years (<http://www.epa.gov/glnpo/sediments.html>).

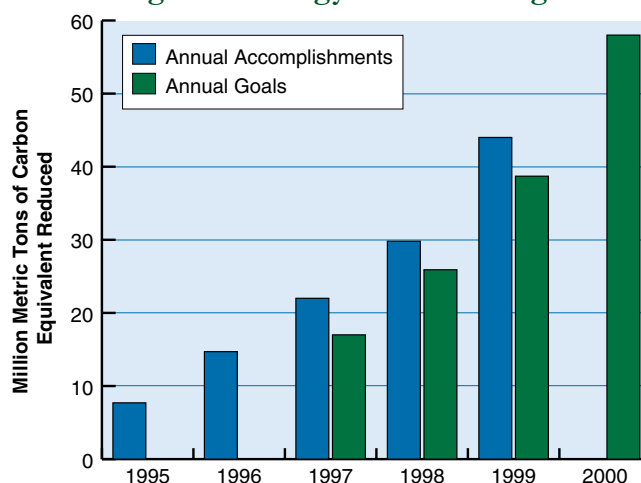
### Protecting The Northwestern Border

The United States and its multilateral partners ended the first phase of a project to help Russia manage PCBs in an environmentally sound manner and thereby comply with pertinent international agreements. Although estimated PCB stocks and releases are considerable, preliminary reviews indicate that the quantities might be underestimated. Once high-priority sources have been identified and feasibility studies completed, Russia will take corrective measures that ultimately will reduce the environmental releases of PCBs and long-range transport from Russia. In turn this reduction will lower the bio-uptake of PCBs not only in Russia but also in Alaska and other receiving areas.

### Addressing Global Climate Change

Through EPA's climate program, the Agency is delivering real greenhouse gas emissions reductions by identifying and addressing opportunities to reduce energy waste and to prevent emissions of potent greenhouse gases associated with the public and private sectors, including consumers. For 2000 and beyond EPA's objective is to reduce U.S. greenhouse gas emissions to levels consistent with international commitments under the Framework Convention on Climate Change, building on initial efforts under the Climate Change Action Plan. For FY 2000 EPA is on track to meet its greenhouse gas emissions reduction target of 58 million metric tons of carbon equivalent (MMTCE). Data will be available in spring 2001.

#### Greenhouse Gas Reductions from EPA Climate Change Technology Initiative Programs



The core of EPA's climate change efforts is government-industry partnership programs designed to overcome the barriers that limit investments by consumers, businesses, and other organizations in cleaner or more efficient technologies. Energy-efficient technologies provide a sizable opportunity for limiting emissions of greenhouse gases while simultaneously improving local air quality and saving money for both businesses and consumers. EPA's climate change program has shown results by meeting emission-reduction goals and demonstrating cost-effectiveness. Based on actions taken by partners in the voluntary programs, EPA reports the following results through 1999:

- Annual greenhouse gas emission reductions equivalent to eliminating the emissions from about 18 million cars.

- Annual reductions in emissions of nitrogen oxide (NO<sub>x</sub>) totaling over 100,000 tons, equivalent to the annual emissions from 70 power plants.
- Continued emission reductions from actions already taken by program partners of more than 20 MMTCE per year through 2010.

Cars, trucks, aircraft, and other components of the nation's transportation system emit about one-third of total U.S. greenhouse gas emissions. Transportation policies, plans, and choices have an immense effect on greenhouse gas emissions, particularly on carbon production. Although technology and market-oriented measures will make a major contribution toward reducing emissions, efforts to reduce vehicle miles traveled (VMT) are also critical for achieving EPA's greenhouse gas emission reduction goals. To this end in FY 2000 EPA actively supported voluntary regional, state, and community efforts that encourage additional travel choices and alternatives to single-occupancy vehicle driving. An example of these efforts is the national Commuter Choice program that was launched in 2000 to achieve VMT reductions. Commuter Choice programs encourage employers to provide their employees transportation options in commuting to and from work, such as free or reduced cost passes for public transportation, opportunities to carpool, telecommuting options, and incentives to bike or walk.

In addition EPA joined six other federal agencies, along with Ford, General Motors, and DaimlerChrysler, in the Partnership for a New Generation of Vehicles (PNGV), an ongoing program to develop a new generation of safe, attractive, affordable vehicles with ultra-low emissions and high fuel efficiency. In FY 2000, as part of the PNGV program, EPA demonstrated 72 mpg (gasoline equivalent) on a mid-size research chassis using a state-of-the-art diesel engine and an EPA-invented, patented, and developed hybrid drivetrain.

### Restoring the Ozone Layer

The stratospheric ozone layer protects life on earth from harmful ultraviolet (UV) radiation. Scientific evidence amassed over the past 25 years indicates that the use of chlorofluorocarbons (CFCs) and other halogenated chemicals has resulted in the destruction of stratospheric ozone. In FY 2000 EPA furthered the nation's commitment to assisting in the restoration of the ozone layer by tracking, through a marketable permit system, industry compliance with regulatory restrictions

on the consumption of ozone-depleting substances. Although continued U.S. commitment to these restrictions is essential to halting the destruction of ozone in the stratosphere, the participation of developing countries is also key to ensuring the timely restoration of the ozone layer. U.S. leadership in international negotiations during FY 2000 led to an agreement with China, the largest consumer of ozone-depleting substances among developing countries. China will now reduce its use of ozone-depleting solvents at a faster rate than that to which it originally agreed.

Scientists anticipate that by the end of this decade the stratospheric ozone hole will stop growing. However, because ozone-depleting substances have a long life and were emitted for many years before EPA's restrictions and the international agreement, the public is faced with potentially unhealthy levels of UV radiation. Recognizing this, during FY 1999 EPA launched the SunWise School Program to promote sun safety practices. The program's goal is to protect children from skin cancer, cataracts, and other long-term UV-related health effects. SunWise now reaches more than 10,000 children between the ages of five and 15 in 42 states across the nation, and the list of participating schools is growing. Pre- and post-program surveys of participating students show that the program has already begun to increase the level of knowledge among children about ways to reduce their exposure to harmful UV radiation. More importantly the students are demonstrating their knowledge. In FY 2000 EPA set a target that 60 percent of children in SunWise schools would be very likely to use Healthy People 2000 "safe sun" practices. EPA has found, however, that an "all of the time" standard is more likely to be associated with greater risk reduction and less disease. Using this revised metric, in FY 2000 the proportion of SunWise children who used sunscreen all of the time was 26 percent; hats, 18 percent; long-sleeve shirts, 23 percent; and sunglasses, 25 percent. The action steps recommended by SunWise are provided at <http://www.epa.gov/sunwise/actionsteps.html>.



## Reducing Circulating Chemicals

EPA made progress in FY 2000 toward reducing the risks to U.S. human health and ecosystems from selected toxics that circulate in the environment at global and regional scales. Under the auspices of the North American Commission for Environmental Cooperation, the United States, Canada, and Mexico prepared a second-phase North American Regional Action Plan (NARAP) for mercury, which calls for ending specific mercury uses where there is an unreasonable or otherwise unmanageable risk of release to the environment or risk to human health. However, because of the countries' differences in levels of priority and effort devoted to mercury risk reduction, economic conditions, and technological and infrastructure capabilities, they did not establish time lines for completing the activities set forth in the nonbinding mercury NARAP.

EPA expanded its mercury monitoring network in FY 2000 to collect additional data on the long-range transport and transformation of mercury. Through this monitoring, EPA and its partners are contributing the data required for modeling through the placement of new air quality monitors in coastal Alaska. These new monitors will determine the relative apportionment between domestic and international sources of mercury that concentrates in fish (the primary exposure route for humans). Having such apportionments will permit EPA to focus domestic emission control efforts and international risk management initiatives, all of which are intended to minimize mercury releases to the environment and thus decrease exposures to mercury. This effort supports domestic obligations under the Clean Air Act, as well as those made in the mercury NARAP and other agreements.

The negotiations on a legally binding global convention on persistent organic pollutants (POPs) such as dichlorodiphenyltrichloroethane (DDT) were successfully concluded in December 2000. It is not yet clear, however, whether international financial institutions, the United States, and other developed countries will be able to offer levels of capacity-building support sufficient to prompt key developing countries to sign and comply with the global POPs convention. Finally, EPA and other member countries of the Organization for Economic Cooperation and Development completed work on five harmonized test guidelines, a protocol of consistent international testing

guidelines based on a combination of standard U.S. and European chemical toxicity testing procedures.

## Increasing Harmonization and Environmental Capacity

In establishing a greater connection between the environment and trade, EPA, working with other federal agencies, contributed to the development and implementation of Executive Order (E.O.) 13141, *Environmental Review of Trade Agreements*. In addition to EPA's analysis of the potential regulatory effects of trade agreements, under the E.O. the Agency will contribute to the "core analysis" by estimating changes in various categories of pollution in the United States that could be expected from the trade agreement. When fully implemented in 2001, E.O. 13141 will represent one of the most significant policy contributions to the environment and trade debate because comprehensive trade agreements potentially touch every natural resource through the primary and secondary effects of tariff changes, removal of nontariff trade barriers, and rule changes.

High-quality environmental information plays a vital role in building capacity to address global environmental problems. The Agency's international environmental information efforts have expanded rapidly during the past several years. In FY 2000 EPA completed its first International Environmental Information Inventory and used the resulting data to develop the Agency-wide Strategic Plan for International Environmental Information. This plan will help EPA track new international information programs, ensure that programs do not duplicate efforts, and target scarce resources as effectively as possible. Toolkits were also developed and designed to help other countries enhance their environmental libraries and to locate, through the Internet, environmental information from around the world.

## SUMMARY OF FY 2000 PERFORMANCE

EPA has long been recognized as the leading source of environmental regulatory and management expertise worldwide. The direct benefit to U.S. citizens and their environment resulting from this involvement underscores the importance of ensuring an active and continuing international presence. EPA has made progress in its efforts to advance protection of the



global commons. There has been progress in protecting the ozone layer, and progress is being made to reduce the increasing rate of greenhouse gas emissions. Treaties and binding conventions such as the Global POPs are under way and are advancing the ideal of sustainable environmental growth. People along the U.S. border in various municipalities have access to water and wastewater treatment for the first time. Continued progress will rely greatly on the Agency's ability to achieve agreement on key global negotiations and on its ability to sustain support for this work.

## RESEARCH CONTRIBUTIONS

In FY 2000 EPA research and assessment activities examined the potential consequences of climate change for human health and ecosystems in the United States. EPA assessed the possibility of changes in disease patterns due to changing climate; the impact of heat stress on populations, especially senior citizens and children; the air pollution-related health effects of climate change; and the socioeconomic consequences of extreme weather events. Researchers also analyzed the impact of climate change and variability on the ability of ecosystems to provide the services that many people rely on but often take for granted, such as water filtration and air purification. In an effort to understand how climate change might affect life in the United States, EPA sponsored the Great Lakes, Mid-Atlantic, and Gulf Coast Regional Assessments, as well as the Health Sector Assessment, as part of the U.S. Global Change Research Program's First National Assessment of the Potential Consequences of Climate Variability and Change for the United States. The assessments provide stakeholders and policy makers with information on the potential risks and opportunities presented by climate change and offer options for adapting to the changes.

## STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

EPA's Office of the Inspector General (OIG) evaluated the Great Lakes Program at the Agency's request to provide advice and assistance on how to improve the Lakewide Management Plan (LaMP) and Remedial Action Plan processes and develop and implement effective national strategies and agreements. The Agency undertook several actions consistent with

the OIG's recommendations, including accelerating the development of LaMP documents that were published for the Great Lakes in FY 2000; reinstituting the Great Lakes U.S. Policy Committee, including states, tribes, and other federal agencies; and developing a tracking system to address the issues. Efforts will continue toward improving the Great Lakes Strategy and clearly identifying the responsibilities of EPA program offices and regions, states, and Canada to fully support the restoration and maintenance of the chemical, physical, and biological integrity of the Great Lakes.

Please see Section III - *Management Accomplishments and Challenges* for a further discussion of the above issues.

## PROGRAM EVALUATION

EPA's Great Lakes Program regularly consults with federal, state, and tribal governmental agencies responsible for setting strategic directions for Great Lakes environmental protection. In FY 2000 EPA responded to FY 1999 consultations and evaluations by reinstituting the Great Lakes U.S. Policy Committee. The consultations and evaluations were conducted as a series of meetings and did not result in a published report.

Pursuant to a congressional request, the General Accounting Office (GAO) reviewed the partnership between the federal government, including EPA, and three domestic automobile manufacturers (the Partnership for a New Generation of Vehicles (PNGV)), focusing on the following aspects: (1) the progress made to date toward achieving the partnership goals; (2) the historical federal funding levels; (3) the technologies being developed under PNGV; and (4) a comparison of the overall research and development activities of the automobile manufacturer participants with research sponsored by the partnership.

In its letter "Cooperative Research: Results of U.S.-Industry Partnership to Develop a New Generation of Vehicles" (Letter, March 30, 2000, GAO/RCED-00-81, <http://www.gao.gov>), GAO noted, "While progress has been made toward the goals of the PNGV partnership, technological and affordability obstacles still need to be overcome. It is not yet possible to assess if the partnership is improving U.S. competitiveness in manufacturing, its first goal. The partnership is making progress towards its second goal of implementing

commercially viable innovations in conventional vehicles. In addition the partnership has made progress toward its third goal, releasing concept cars by March 2000 that manufacturers stated demonstrate the ability to achieve nearly 80 miles per gallon. However, the manufacturers and National Research Council stated that significant technological and affordability obstacles remain.”

## ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

Development of EPA’s FY 2001 Annual Performance Goals (APGs) and measures under Goal 6 was guided by FY 2000 performance results. In some instances data indicated no change in course. Most programs are on track toward meeting the strategic goal. In other cases, however, the Agency made dramatic changes. For example the Agency’s decisions to pursue enhanced involvement in trade negotiations and liberalization agreements in FY 2000 have focused greater attention on analyzing and participating in trade agreements affecting U.S. environmental regulations as EPA implements the E.O. on environmental review. In addition, the following programs reassessed their direction in FY 2001 based on FY 2000 performance:

- *Great Lakes Basin ecosystem.* The depletion of oxygen in the Central Basin of Lake Erie indicates potential problems, which will be explored further in FY 2001. Identification of the 160th invasive species has reinforced the urgency of EPA and its partners making progress on technology to prevent the further introduction and spread of invasive species. Projects are exploring the use of filtration, as well as the use of UV light, for secondary treatment of ballast water, and are looking at the impacts of “No Ballast on Board” vessels. The FY 2001 performance measures for Great Lakes Ecosystem Assessment have been revised to measure ecological trends, a significant improvement over FY 2000 measurement of outputs.
- *Ozone depletion.* EPA’s successful performance in FY 2000 is reflected in its FY 2001 ozone layer restoration goals. The goals will include implementing the next regulatory step in the phaseout of methyl bromide, implementing a market-based allowance allocation system for

hydrochlorofluorocarbon (HCFC) production and importation, increasing the number of developing countries helped by U.S. assistance through the Multilateral Fund, and improving children’s knowledge of the importance of proper sun protection by expanding the SunWise School Program to include 20 percent more children across the country.

- *Circulating chemicals.* EPA’s performance in FY 2000 is reflected in the Agency’s FY 2001 goals for increasing the number of mercury transport monitoring stations operating in North America and elsewhere (e.g., Russia), as well as its targets for POPs capacity-building projects.

## TABLES OF RESULTS

The following tables of results include performance results for the 12 FY 2000 APGs that appear in Goal 6. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance.

**FY 2000 Annual Report**  
**Annual Performance Goals and Measures - Table of Results**

Summary FY 2000 Performance		GOAL 6 - REDUCTION OF GLOBAL & CROSS-BORDER RISKS			
9	Goals Met	0	Goals Not Met	3	Other
FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999	
		Planned	Actual	Actual	
BY 2005, REDUCE TRANSBOUNDARY THREATS TO HUMAN HEALTH AND SHARED ECOSYSTEMS IN NORTH AMERICA CONSISTENT WITH OUR BILATERAL AND MULTILATERAL TREATY OBLIGATIONS IN THESE AREAS, AS WELL AS OUR TRUST RESPONSIBILITY TO TRIBES.					
FY 2000 APG 42: Five additional water/wastewater projects along the Mexican border will be certified for design-construction for a cumulative total of 30 projects.  (FY 1999) One additional water/wastewater project along the Mexican Border will be certified for design construction.  Explanation: Goal met. The goal for FY 2000 was exceeded by five projects due to the more rapid implementation of the process that has been developed and refined by all Border partners. The cumulative total of water/wastewater projects certified for design-construction along the Mexican border is actually 36 projects, rather than the 30 projects cited in the APG.  Data Source: Manual system.  Data Quality: Data are manually verified.		5	10	9	
FY 2000 APG 43: Measurable improvements in Great Lakes ecosystem components.  Performance Measures - Indicator Indices. - Model predictions for toxics reductions.  Explanation: Goal met. The goal for FY 2000 was to improve the capacity for measuring environmental outcomes by developing better models and indicators. This year protocols for the ten indices were developed for Limnology (Trophic State, Dissolved Oxygen, and Swimmability), Atmospheric (PCBs, Pesticides, and PAHs), Biology (Benthic Community Health), Sediments (Sediment Quality and Remediation), and Fish Contaminants (Safety for Wildlife Consumption and Safety for Human Consumption). Outcome reporting will begin in FY 2001.  Modeling illustrates that atrazine does not appear to breakdown after it enters the lake; consequently, with continued use, its concentration in Lake Michigan will likely increase.  Data Source: Data comes from the Great Lakes National Program Office (GLNPO) base monitoring program, which is a cooperative effort of EPA, the Great Lakes states, U.S. Geological Survey, and U.S. Fish and Wildlife Service.  Data Quality: GLNPO has a Quality Management system in place which conforms to the new EPA quality management order. GLNPO is audited every three years in accordance with federal policy for Quality Management. There is greater uncertainty regarding the representativeness of data collected in near shore areas because of the greater variability of the near shore environment.		9 5	10 5	No FY 1999 APG	

Goal 6: Reduction of Global and Cross-Border Risks

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
BY 2000 AND BEYOND, U.S. GREENHOUSE GAS EMISSIONS WILL BE REDUCED TO LEVELS CONSISTENT WITH INTERNATIONAL COMMITMENTS AGREED UPON UNDER THE FRAMEWORK CONVENTION ON CLIMATE CHANGE, BUILDING ON INITIAL EFFORTS UNDER THE CLIMATE CHANGE ACTION PLAN.				
<b>FY 2000 APG 44:</b> Assess the consequences of global climate variability at a regional scale.  (FY 1999) Conduct preliminary assessment of consequences of climate change at three geographical locations: (Mid-Atlantic, Gulf Coast, and upper Great Lakes.)  Explanation: Goal met. Results from the three EPA-sponsored Regional Assessments (Mid-Atlantic, Great Lakes, and Gulf Coast) were included in the First U.S. National Assessment report, "Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change." Mandated by Congress in the Global Change Research Act of 1990 and organized by the U.S. Global Change Research Program (USGCRP), this is the first comprehensive assessment of the potential impacts of climate change on the United States.  Data Source: Agency generated material.  Data Quality: As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision-making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry and other federal agencies.	3	3	2	
<b>FY 2000 APG 45:</b> Assist 10 to 12 developing countries with economies in transition in developing strategies and actions for reducing emissions of greenhouse gases and enhancing carbon sequestration.  Explanation: Goal met.  Data Source: Manual system.  Data Quality: Data are manually verified.	10	10	No FY 1999 APG	
<b>FY 2000 APG 46:</b> Demonstrate technology for a 70 mpg mid-size family sedan that has low emissions and is safe, practical, and affordable.  Explanation: Goal met. EPA demonstrated 72 mpg (gasoline equivalent) on a midsize research chassis using a state-of-the art diesel engine and an EPA-invented, patented, and developed hybrid drivetrain.  Data Source: EPA uses Fuel Economy Test data for both urban and highway test cycles under the EPA Federal Test procedure for passenger cars. EPA fuel economy tests are performed at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan.  Data Quality: The EPA fuel economy tests are performed in accordance with the EPA Federal Test Procedure and all applicable quality assurance/quality control procedures. The EPA's National Vehicle and Fuel Emissions Laboratory is recognized as the world state-of-the-art facility for fuel economy and emissions testing.	70 mpg	72 mpg	No FY 1999 APG	
<b>FY 2000 APG 47:</b> Greenhouse gas (GHG) emissions will be reduced from projected levels by more than 58 million metric ton of carbon equivalent (MMTCE) per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 level by about 20%.	58	Data available in Spring 2001		



FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
(FY 1999)	Reduce U.S. GHG emissions by 35 MMTCE per year through partnerships with businesses, schools, state and local governments, and other organizations.			46
<b>Explanation:</b>	<p><u>FY 2000:</u> EPA is on track to meet its FY 2000 GHG emissions reduction target of 58 MMTCE.</p> <p><u>FY 1999:</u> Goal met. Based on information received in FY 2000, EPA exceeded its FY 1999 target of 35. Reductions came from energy star program and multiple sectors including buildings, waste, industrial methane, transportation, and state and local programs.</p>			
<b>Data Source:</b>	Baseline data for carbon emissions related to energy use comes from the Energy Information Agency (EIA). Baseline data for non-carbon dioxide (CO <sub>2</sub> ) gases are maintained by EPA. EPA reports on facility specific energy-saving improvements. A carbon-conversion factor is used to convert this information to estimated GHG reductions. EPA thus maintains a tracking system of emissions reductions based on the reports submitted by its partners.			
<b>Data Quality:</b>	EPA has a quality assurance process in place to check the validity of partner reports. Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of GHG emissions. EPA regularly evaluates the effectiveness of its climate programs through interagency evaluations. A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs the were examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment..." The voluntary nature of the program may affect reporting. Some of the data are indirect measures of GHG emissions modeled using conversion factors and methods to convert material-specific reductions to GHG emissions reductions.			
<b>FY 2000 APG 48: Provide analysis, assessment, and reporting support to Administration officials, the Intergovernmental Panel on Climate Change, and the Framework Convention on Climate Change.</b>				No FY 1999 APG
<b>Performance Measure</b> - Greenhouse Gas Inventory.		1	1	
<b>Explanation:</b>	Goal met. The Greenhouse Gas Inventory serves as a basis for national actions by countries to reduce their greenhouse gas emissions.			
<b>Data Source:</b>	Information is compiled in accordance with appropriate guidance from the United Nations Framework Convention on Climate Change and other bodies, using data primarily from statistical agencies and scientific literature.			
<b>Data Quality:</b>	All products are subject to internal governmental review as well as full public review. Secondary data used in analysis are generally peer reviewed during development.			
<b>FY 2000 APG 49: Reduce energy consumption from projected levels by about 60 billion kilowatt hours, resulting in over \$8 billion in energy savings to consumers and businesses that participate in EPA's climate change programs.</b>		60	Data available in FY 2001	No FY 1999 APG
<b>Explanation:</b>	EPA is on track to meet its target.			
<b>Data Source:</b>	EPA collects partner reports on facility specific improvements (e.g., space upgraded, kWh reduced).			
<b>Data Quality:</b>	Same as FY 2000 APG 47.			

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
BY 2005, OZONE CONCENTRATIONS IN THE STRATOSPHERE WILL HAVE STOPPED DECLINING AND SLOWLY BEGUN THE PROCESS OF RECOVERY.				
<b>FY 2000 APG 50:</b> Provide assistance to at least 50 developing countries to facilitate emissions reductions toward achieving the requirements of the Montreal Protocol.	50	50	No FY 1999 APG	
<b>Explanation:</b> Goal met.				
<b>Data Source:</b> EPA measures the progress toward international implementation goals by tracking the number of countries receiving assistance, dollars allocated to each, and the expected reduction in ozone-depleting substances in assisted countries. EPA and the United Nations Environment Programme (UNEP) maintain the database.				
<b>Data Quality:</b> EPA receives periodic reports on the financial status of participating countries from UNEP. Information from UNEP is then cross-checked with Agency records to ensure accuracy.				
<b>FY 2000 APG 51:</b> Restrict domestic consumption of class II hydrochlorofluorocarbons (HCFCs) below 15,240 ozone depletion potential-weighted metric tons (ODP MTs) and restrict domestic exempted production and import of newly produced class I chlorofluorocarbons (CFCs) and halons below 60,000 ODP MTs.	<15,240 <60,000	Data available in FY 2001	<208,400 <130,000	
(FY 1999) Ensure that domestic consumption of class II HCFCs will be restricted to below 208,400 Mts and domestic exempted production and import of newly produced class I CFCs and halons will be restricted to below 130,000 MTs.				
<b>Explanation:</b> FY 2000: EPA is on track to meet its targets.  FY 1999: Goal met. Based on information received in FY 2000, EPA met its FY 1999 target.				
<b>Data Source:</b> EPA tracks progress on restricting domestic consumption of Class II HCFCs by monitoring industry reports of compliance with phaseout regulations. EPA maintains these data in its Allowance Tracking System (ATS) database.				
<b>Data Quality:</b> The ATS data are subject to a Quality Assurance Plan. In addition the data are subject to an annual Quality Assurance review. The ATS is programmed to ensure consistency of the data elements reported by companies. Inconsistent data are flagged by the tracking system for review and resolution by the tracking system manager. The ATS receives monthly information on domestic production, imports and exports from the International Trade Commission. This information is then cross-checked with compliance data submitted by reporting companies. Regional inspectors perform inspections and audits on-site at producers, importers, and exporters facilities. These audits verify the accuracy of compliance data submitted to EPA.				
BY 2005, REDUCE THE RISKS TO U.S. HUMAN HEALTH AND ECOSYSTEMS FROM SELECTED TOXICS THAT CIRCULATE IN THE ENVIRONMENT AT GLOBAL AND REGIONAL SCALES CONSISTENT WITH INTERNATIONAL OBLIGATIONS.				
<b>2000 APG 52:</b> Successfully conclude international negotiations on a global convention on Persistent Organic Pollutants (POPs) reaching agreement on POPs selection criteria, technical assistance, and risk management commitments on specified POPs.	9/30/00	12/15/00		
(FY 1999) Obtain international agreement on criteria for selecting POPs to be covered in a new global POPs treaty, and on capacity-building activities to support the convention's implementation.			12/15/00	

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
<b>Explanation:</b>	<p><u>FY 2000:</u> Goal met. The global POPs treaty was concluded in December 2000. Although negotiations were delayed by 3 months into the next fiscal year, the target was met.</p> <p><u>FY 1999:</u> Goal not met. The achievement of this goal was met during FY 2000.</p>			
<b>Data Source:</b>	Manual system.			
<b>Data Quality:</b>	Data are manually verified.			
<b>BY 2005, INCREASE THE APPLICATION OF CLEANER AND MORE COST-EFFECTIVE ENVIRONMENTAL PRACTICES AND TECHNOLOGIES IN THE UNITED STATES AND ABROAD THROUGH INTERNATIONAL COOPERATION.</b>				
<b>FY 2000 APG 53:</b>	<b>Deliver 30 international training modules; implement six technical assistance/technology dissemination projects; implement five cooperative policy development projects; and disseminate information products on U.S. environmental technologies and techniques to 2,500 foreign customers.</b>	30 6 5 2,500	12 6 5 3,100	
(FY 1999)	<i>Deliver 30 international training modules; implement six technical assistance/technology dissemination projects; implement five cooperative policy development projects; and disseminate information products on United States environmental technologies and techniques to 2,500 foreign customers.</i>			16 6 6 2,500
<b>Explanation:</b>	Goal met. EPA met the overall goal. Although efforts on one of the four performance measures fell short, efforts on another performance measure greatly exceeded the target. The same number of people were reached, just through individual process, rather than through training modules. This shortfall in the delivery of the modules can be attributed to (1) leveling off of EPA funds, (2) maturation of our programs, and (3) less demand than originally anticipated. EPA fulfilled all requests for training from countries that were able to supply their share of the costs.			
<b>Data Source:</b>	Manual system.			
<b>Data Quality:</b>	Data are manually verified.			